UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,673	10/19/2000	Thomas E. Saulpaugh	5181-64200	7203

7590   05/14/2004

Robert C. Kowert
Conley Rose & Tayon PC
P O Box 398
Austin, TX 78767-0398

EXAMINER
MANIWANG, JOSEPH R

ART UNIT	PAPER NUMBER
2144	10

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 March 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

1.   Claims 1, 9, 16, 17, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill et al. (U.S. Pat. No. 5,511,197), hereinafter referred to as Hill.

2.   Regarding claims 1, 9, and 17, Hill disclosed a method and system for communicating data between processes across a network. Hill disclosed creating a server object stub and interface, a client object proxy and interface, and a channel between the two (see column 5, line 60 through column 6, line 4). The stub and proxy objects sent and received messages, acting as message gates as claimed (see column 7, lines 19-42). Hill disclosed the use of a protocol for stub channels (see column 20, lines 29-31). Proxies and stubs shared channels and the RPC runtime for communication, but each object communicated independently (see column 14, lines 35-55; Fig. 14). Hill further disclosed the use of a server network address, providing a transport reference as claimed (see column 20, lines 4-8).

3.   Regarding claims 16 and 24, Hill disclosed identifying stubs with an address (see column 10, lines 30-32).

4.   Claims 1-4, 8-12, 15, 17-20, and 23 are rejected under 35 U.S.C. 102(b) as being

anticipated by Serlet et al. (U.S. Pat. No. 5,481,721), hereinafter referred to as Serlet.

5.   Regarding claims 1, 9, and 17, Serlet disclosed a method and system for

transmitting messages between objects located in different processes. A proxy object

provided a way to send and receive messages on behalf of objects, thus providing

message gates as claimed (see column 6, lines 53-63). Serlet disclosed creating a

plurality of proxies for a process (see column 11, lines 49-53). Serlet disclosed using a

specific protocol between sender and receiver (see column 12, lines 25-30). Gates

were matched in a master/slave relationship, and the used ports for communication

between processes, thus providing a transport reference as claimed (see column 12,

lines 7-13).

6.   Regarding claims 2-4, 10-12, and 18-20, Serlet disclosed verying messages for

type and form of encoding (see column 12, lines 30-45).

7.   Regarding claims 8, 15, and 23, Serlet disclosed sending messages in both

directions through the established connection, thus providing a bi-directional channel as

claimed (see column 12, lines 21-24).

8.   Claims 1-4, 8-12, 15, 17-20, and 23 are rejected under 35 U.S.C. 102(e) as being

anticipated by Marcos et al (U.S. Pat. No. 6,347,342), hereinafter referred to as Marcos.

9.   Regarding claims 1, 9, and 17, Marcos disclosed a method and system for

transmitting message objects between a client and server. A connection between client

objects and server objects was created through proxy and stub objects, which allowed

for sending and receiving messages, thus providing message gates as claimed (see

column 9, lines 39-41). An association was mapped between proxy and stub objects,

pairing them together (see column 7, lines 37-39). Marcos disclosed a transport layer

for transmitting messages, and disclosed the use of a protocol within the transport (see

column 8, lines 36-41).

10.   Regarding claims 2-4, 10-12, and 18-20, Marcos disclosed proxy and stub

objects to have the ability to verify object type (see column 15, line 60 through column

16, line 55).

11.   Regarding claims 8, 15, and 23, Marcos disclosed sending messages between

client and server in both directions, thus providing a bi-directional channel as claimed

(see column 7, lines 55-56).

12.   Claims 1, 6-9, 14-17, and 22-24 are rejected under 35 U.S.C. 102(b) as being

anticipated by Kingdon (U.S. Pat. No. 5,349,642), hereinafter referred to as Kingdon.

13.   Regarding claims 1, 9, and 17, Kingdon disclosed a method and system for

client/server communication. A client and server made use of client and server stubs

connected to a transport for communicating to each other, thus providing paired

message gates as claimed (see column 1, lines 30-54; Fig. 1). Kingdon disclosed a

specific protocol for use in the system (see column 2, lines 38-40). Kingdon disclosed

the use of network addresses for the source and destination of a message, thus

providing a transport reference as claimed (see column 2, lines 50-52).

14.   Regarding claims 6, 7, 14, and 22, Kingdon disclosed appending a credential to each message packet (see column 3, line 68 through column 4, line 6). The receiver then verified the credential to authenticate the message (see column 4, lines 6-13).

15.   Regarding claims 8, 15, and 23, connections between client and server stubs through the transport were bi-directional (see Fig. 1).

16.   Regarding claims 16 and 24, Kingdon disclosed using network addresses for sources and request packets (see column 2, lines 50-52, 62-65).

Claim Rejections - 35 USC § 103

17.   Claims 5, 13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcos et al. (U.S. Pat. No. 6,347,342), hereinafter referred to as Marcos, and further in view of Bergman et al. (U.S. Pat. No. 6,564,263), hereinafter referred to as Bergman.

18.   Marcos disclosed a method and system for transmitting message objects between a client and server. A connection between client objects and server objects was created through proxy and stub objects, which allowed for sending and receiving messages, thus providing message gates as claimed (see column 9, lines 39-41). An association was mapped between proxy and stub objects, pairing them together (see column 7, lines 37-39). Marcos disclosed a transport layer for transmitting messages, and disclosed the use of a protocol within the transport (see column 8, lines 36-41). Marcos disclosed proxy and stub objects to have the ability to verify object type (see column 15, line 60 through column 16, line 55). Marcos disclosed sending messages

between client and server in both directions, thus providing a bi-directional channel as
claimed (see column 7, lines 55-56).

19.   Marcos did not specifically mention the use of the XML format for messages.
Marcos did however express the desire to provide messaging between different
environments and regardless of object implementation (see column 15, lines 62-64;
column 16, lines 26-32). One of ordinary skill in the art then would have been led to
search related art for ways to enhance messaging between different environments.

20.   Bergman disclosed a framework for providing multimedia content description in a
networked environment. Bergman disclosed the use of XML as the basis of the
representation language (see column 14, lines 7-11). Bergman stated a portability
advantage of XML, as it is independent of machine, operating system, programming
language, etc., as well as its ability to link content of different modality (see column 14,
lines 14-18).

21.   It was a desire of Marcos to provide messaging between clients and servers
operating under different environments and object implementations (see column 15,
lines 62-64; column 16, lines 26-32). While Marcos did not specifically mention the use
of XML, it would have been obvious to one of ordinary skill in the art to consider the use
of such a format, as Bergman disclosed XML to be both portable, independent of
operating environment, and advantageous for linking different modalities of content (see
column 14, lines 14-22), thus providing messaging between different environments and
implementations as desired by Marcos.

Response to Arguments

22.   Applicant's arguments, see Paper No. 9, filed 03/01/04, with respect to claims 1-
4, 9-12, 16-20, and 24 rejected under 35 U.S.C. 102(b) as being anticipated by Wold et
al. (U.S. Pat. No. 5,386,568), have been fully considered and are persuasive. The
rejection under 102(b) as being anticipated by Wold et al. (U.S. Pat. No. 5,386,568) of
claims 1-4, 9-12, 16-20, and 24 has been withdrawn.

23.   Applicant's arguments filed 03/01/04 have been fully considered but they are not
persuasive.

24.   Regarding claims 1, 9, 16, 17, and 24 rejected under 35 U.S.C. 102(b) as being
anticipated by Hill et al. (U.S. Pat. No. 5,511,197), hereinafter referred to as Hill,
Applicant asserts that Hill did not disclose a system wherein each message gate is
configured for sending and receiving messages in a data representation language.
Examiner submits that Hill disclosed the claimed limitations, as Hill disclosed stub and
proxy objects configured to send and receive messages (see column 7, lines 19-42),
thus disclosing message gates configured for sending and receiving messages as
claimed. The broad concept of communicating messages in a data representation
language as claimed relates to nothing more than a standard method or format of the
messages communicated. Hill disclosed such a limitation, stating that stub channels
utilized a certain protocol to communicate (see column 20, lines 29-31), thus disclosing
communication of messages in a data representation language.

25.   Regarding claims 1-4, 8-12, 15, 17-20, and 23 rejected under 35 U.S.C. 102(b)

as being anticipated by Serlet et al. (U.S. Pat. No. 5,481,721), hereinafter referred to as

Serlet, Applicant asserts that Serlet did not disclose sending and receiving messages in

a data representation language. Examiner submits that a data representation language

as claimed is broadly interpreted as a standard format or method for communicating

data. As such, Serlet disclosed such a limitation, stating that messages sent between a

sender and receiver must be encoded in a form understandable by both sides, providing

a type of protocol for communicating data (see column 12, lines 21-30).

26.   Regarding claims 1-4, 8-12, 15, 17-20, and 23 rejected under 35 U.S.C. 102(e)

as being anticipated by Marcos et al (U.S. Pat. No. 6,347,342), hereinafter referred to

as Marcos, Applicant asserts that Marcos did not disclose sending and receiving

messages in a data representation language. Examiner submits that a data

representation language as claimed is broadly interpreted as a standard format or

method for communicating data. Marcos disclosed the use of a protocol for

communicating messages between client objects and server objects (see column 8,

lines 18-44), thus disclosing message gates configured to communicate messages in a

data representation language.

27.   Applicant also asserts that Marcos did not disclose verifying messages according

to a data representation language message schema. Examiner submits that in its

broadest sense, a data representation language message schema relates to nothing

more than a set format for communicating data that messages must adhere to in order

for a process to interpret them. Marcos taught the use of such a format, stating that objects could communicate using specific data types, thus providing a message schema. Furthermore, verification of these data types was implicitly disclosed, as Marcos disclosed the possibility of translating data types into a type compatible with a receiving object, the need for such translation clearly determined only through a verification of the message data type according to a given schema acceptable by the receiving object (see column 15, line 60 through column 16, line 55).

28.   Regarding claims 1, 6-9, 14-17, and 22-24 rejected under 35 U.S.C. 102(b) as being anticipated by Kingdon (U.S. Pat. No. 5,349,642), hereinafter referred to as Kingdon, Applicant asserts that Kingdon did not disclose sending and receiving messages in a data representation language. Examiner submits that a data representation language as claimed is broadly interpreted as a standard format or method for communicating data. Kingdon thus disclosed communicating messages in a data representation language, as messages were communicated in packets created with a specific format (see column 2, lines 16-49; column 5, lines 25-36).

29.   Regarding claims 5, 13, and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Marcos et al. (U.S. Pat. No. 6,347,342), hereinafter referred to as Marcos, and further in view of Bergman et al. (U.S. Pat. No. 6,564,263), hereinafter referred to as Bergman, Applicant asserts that the rejection of the claims are unsupported by the cited art.

30.   Applicant asserts that Marcos did not teach a system wherein each message
gate is configured to verify messages according to a data representation language
message schema, and wherein the data representation language schema comprises an
eXtensible Markup Language (XML) schema. In response to applicant's arguments
against the references individually, one cannot show nonobviousness by attacking
references individually where the rejections are based on combinations of references.
See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800
F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

31.   Applicant asserts that it would be counterintuitive to use XML to represent code
such as the method invocations disclosed in Marcos, and that as disclosed by Bergman,
XML would be used to represent hierarchical, structured data (i.e., content), not to
translate code, such as the translated method invocations in Marcos. More generally,
Applicant states that there is no reference in Bergman regarding using XML to represent
method specifications or function arguments. However, Examiner submits that
Bergman did disclose the use of XML for describing method specifications and function
arguments. Bergman disclosed it necessary to translate content data in some cases,
such translation performed by a proxy (see column 5, lines 44-63). Preferably, a data
representation encapsulating the necessary arguments and methods to perform the
translation were described in a description scheme object (see column 6, lines 39-67).
Although this description scheme object was hierarchically structured, functionally it
provided a definition of methods and criteria for performing translations of content data
(see column 7, lines 1-25). Furthermore, Bergman disclosed the use of XML to define

the description scheme object (see column 6, lines 47-48; column 8, lines 10-27;

column 14, lines 3-18). Thus, Bergman disclosed the use of XML to represent methods

and arguments, such as methods and arguments for translating data.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph R Maniwang whose telephone number is (703)

305-3179. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William A Cuchlinski can be reached on (703)308-3873. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JM

MARC D. THOMPSON

MARC THOMPSON

PRIMARY EXAMINER